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APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. FIRST NAMED INVENTOR CONFIRMATION NO. 09/409,478 09/30/1999 ROBERT D. TYLER WICP.68041 5420 **EXAMINER** 01/30/2004 7590 SHOOK HARDY & BACON LLP LEE, EDMUND H ONE KANSAS CITY PLACE **ART UNIT** PAPER NUMBER 1200 MAIN STREET KANSAS CITY, MO 641052118 1732

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.		Applicant(s)	
Office Action Summary	09/409,478	TYLER	
	Examiner	Art Unit	
	EDMUND H. LEE	1732	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet	with the correspondence a	address
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state - Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b). Status	N. 1.136(a). In no event, however, may reply within the statutory minimum of tood will apply and will expire SIX (6) Mutte, cause the application to become	a reply be timely filed thirty (30) days will be considered tim ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on 30	October 2003.		
2a) ☐ This action is FINAL. 2b) ☑ Th	nis action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4)⊠ Claim(s) <u>1-5,7-18,20 and 22</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-5,7-18,20 and 22</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	d/or election requirement.		
Application Papers	•		
9) The specification is objected to by the Exami			
10) ☐ The drawing(s) filed on is/are: a) ☐ a			•
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corre	·		. ` '
11) The oath or declaration is objected to by the	Examiner. Note the attach	led Office Action of form F	21O-152.
Priority under 35 U.S.C. §§ 119 and 120			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority document of the priority document of the priority document. 2. Certified copies of the priority document. 3. Copies of the certified copies of the priority document.	ents have been received. ents have been received in riority documents have bee	Application No	al Stage
application from the International Bure * See the attached detailed Office action for a li 13) Acknowledgment is made of a claim for dome since a specific reference was included in the	st of the certified copies no stic priority under 35 U.S.0	C. § 119(e) (to a provision	• •
37 <u>CFR</u> 1.78.	·	• •	ii Data Sileet,
 a) The translation of the foreign language p 14) Acknowledgment is made of a claim for dome 	• •		e a specific
reference was included in the first sentence of	•		•
Attachment(s)			•
) Notice of References Cited (PTO-892)	4) Interview	v Summary (PTO-413) Paper No	o(s).
Provide of Neterchees Orted (176-652) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice o	f Informal Patent Application (P)	

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DETAILED ACTION

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/6/03 has been entered.
- 2. Claims 1-5, 7-8 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims introduce new matter into the disclosure. The added material which is not supported by the original disclosure is as follows:
- a) the phrase "placing said sheet in contact with a contoured molding tool" (cl 1, ln 5) lacks support in the instant disclosure. The instant disclosure only teaches placing the sheet directly over the mold. See pg 8, lns 8-12. It should be noted that the disclosed step of placing the sheet directly over the mold neither constitutes nor supports the sheet being in contact with the contoured molding tool.

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- b) the phrase "at least partially simultaneously with said sheet being in contact with said contoured molding tool" (cl 1, lns 8-9) lacks support in the instant disclosure. The instant disclosure only teaches transporting the sheet into oven 56; placing the sheet directly over the mold; and heating the sheet by oven 56. See pg 8, lns 8-12 and 21. There is no mention of the sheet being heated for at least a part of the time it is in contact with the tool. It should be noted that the disclosed step of placing the sheet directly over the mold neither constitutes nor supports the sheet being in contact, partially or fully, with the contoured molding tool.
- c) claim 22 lacks support in the instant disclosure. The instant disclosure only teaches transporting the sheet into oven 56; placing the sheet directly over the mold; and heating the sheet by oven 56. See pg 8, lns 8-12 and 21. There is no mention of the drawing being performed, partially or fully, during the step of heating the sheet.
- 3. Claims 9-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims introduce new matter into the disclosure. The added material which is not supported by the original disclosure is as follows:
- a) the phrase "placing said sheet in contact with a contoured molding tool" (cl 9, ln 5) lacks support in the instant disclosure. The instant disclosure only teaches

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placing the sheet directly over the mold. See pg 8, lns 8-12. It should be noted that the disclosed step of placing the sheet directly over the mold neither constitutes nor supports the sheet being in contact with the contoured molding tool.

- b) the phrase "at least partially simultaneously with said sheet being in contact with said contoured molding tool" (cl 9, lns 8-9) lacks support in the instant disclosure. The instant disclosure only teaches transporting the sheet into oven 56; placing the sheet directly over the mold; and heating the sheet by oven 56. See pg 8, lns 8-12 and 21. There is no mention of the sheet being heated for at least a part of the time it is in contact with the tool. It should be noted that the disclosed step of placing the sheet directly over the mold neither constitutes nor supports the sheet being in contact, partially or fully, with the contoured molding tool.
- 4. Claims 13-18 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims introduce new matter into the disclosure. The added material which is not supported by the original disclosure is as follows:
- a) the phrase "placing said sheet in contact with a contoured molding tool" (cl 13, ln 5) lacks support in the instant disclosure. The instant disclosure only teaches placing the sheet directly over the mold. See pg 8, lns 8-12. It should be noted that the

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disclosed step of placing the sheet directly over the mold neither constitutes nor supports the sheet being in contact with the contoured molding tool.

- b) the phrase "at least partially simultaneously with said sheet being in contact with said contoured molding tool" (cl 13, lns 8-9) lacks support in the instant disclosure. The instant disclosure only teaches transporting the sheet into oven 56; placing the sheet directly over the mold; and heating the sheet by oven 56. See pg 8, lns 8-12 and 21. There is no mention of the sheet being heated for at least a part of the time it is in contact with the tool. It should be noted that the disclosed step of placing the sheet directly over the mold neither constitutes nor supports the sheet being in contact, partially or fully, with the contoured molding tool.
- 5. Claims 1-5, 7-18, 20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The step of heating the sheet (cl 1, lns 8-9; cl 9, lns 8-9; cl 13, lns 8-9) is confusing because it is not idiomatically correct. If applicant is attempting to claim that the sheet is heated for at least part of the time it is in contact with the mold then it should be recited clearly.

Claim 22 is confusing because it is idiomatically incorrect. If applicant is attempting to claim that at least a part of the step of drawing is performed during the step of heating then it should be recited clearly.

Correction is required.

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- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable 7. over Schriner et al (USPN 2915427) in view of Reuben (USPN 5171619), Bailey (USPN 4828898) and Grover (USPN 2623242). In regard to claim 1, Schriner et al teach the basic claimed process including a method of producing a vehicle mat (figs 1-4); providing a sheet of thermoplastic material, the sheet having a first and second side (figs 1-4); placing the sheet in contact with a contoured molding tool, the first side directed toward the tool and the second side directed away from the tool (figs 1-4); heating the sheet (col 2, lns 57-64); and vacuum forming (drawing) the sheet toward the tool until the sheet is substantially shaped to the contour of the tool (figs 1-4). In addition, Schriner et al also teach placing the carpet side of the mat against the mold and the backing side away from the mold (figs 1-4). However, Schriner et al does not teach using a sheet of thermoplastic material wherein the second side has a plurality of nibs extending therefrom; using a molding tool having one or more sidewalls that extend upwardly from a flat base and a top surface; and locating the second side of the sheet directed away from the tool. Reuben teaches a method of producing a vehicle mat (figs 1-4); and extruding a sheet of thermoplastic material (thermoplastic elastomer), the sheet having a first and second side, the second side having a plurality of nibs

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extending therefrom (figs 1-4). Schriner et al and Reuben are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the mat of Reuben for the fabric/mat of Schriner et al in order to produce a high-quality vehicle mat having greater traction to an underlying surface. It should be noted that the combination of Schriner et al and Reuben would direct one of ordinary skill in the art to place the carpet side of the mat of Schriner et al (modified) against the mold of Schriner et al thus the nib side of the mat of Schriner et al (modified) would be facing away from the mold. Bailey teaches molding a vehicle mat having a one or more sidewalls and a top surface (fig 4); and vacuum forming the mat to the desired contour between two mold dies each having a flat base (figs 4-5). Schriner et al and Bailey are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the mold tool of Schriner et al to produce the contour of Bailey, i.e., redesigning the mold tool to have one or more sidewalls that extend upwardly from a flat base and a top surface, in order to produce a diverse vehicle mat that can nest within and abut against the sides of a carpeted floor well of a vehicle. Grover teaches using a curing press/mold wherein a sheet of uncured rubber is molded and cured against a vacuum molding surface of the press/mold (col 3, lns 53-63); and heating the sheet at least partially simultaneously with the sheet being in contact with the molding surface (col 3, lns 24-63). It should be noted that Grover is cited in Schriner et al as a molding tool that can be used with the invention of Schriner et al (col 2, lns 38-45). Thus, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to heat the sheet of Schriner et al at least partially simultaneously with the sheet being in contact with the molding tool of Schriner et al (modified) as taught by Grover in order to facilitate molding of the sheet. In regard to claims 2-5 and 7-8, Schriner et al teach drawing by differential pressure (figs 1-4); applying the vacuum pressure through vacuum apertures in the tool (figs 1-4); using a male tool (figs 1-4); producing at least one mat (figs 1-4); and cooling the sheet and removing the sheet from the tool (figs 1-4)--as a note, this is inherent with the process of Schriner et al in order to produce a useable mat. However, Schriner et al does not teach using a thermoplastic elastomer. The combination of Reuben and Schriner et al teach using a thermoplastic elastomer. In regard to claim 22, such is taught by the combination of Schriner et al and Grover.

8. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schriner et al (USPN 2915427) in view of Reuben (USPN 5171619), Bailey (USPN 4828898) and Grover (USPN 2623242). In regard to claim 9, Schriner et al teach the basic claimed process including a method of producing a vehicle mat (figs 1-4); providing a sheet of thermoplastic material, the sheet having a first side (figs 1-4); placing the sheet in contact with a contoured molding tool, the first side directed away from the tool (figs 1-4); heating the sheet to a plastic state (col 2, Ins 57-64); and vacuum forming (drawing) the sheet toward the tool until the sheet is substantially shaped to the contour of the tool (figs 1-4). In addition, Schriner et al also teach placing the carpet side of the mat against the mold and the backing side away from the mold (figs 1-4). However, Schriner et al does not teach extruding a sheet of thermoplastic

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material between a pair of rollers wherein one of the rollers has a plurality of indentations to form nibs on a first side of the sheet; using a molding tool having one or more sidewalls that extend upwardly from a flat base and a top surface; and locating the first side of the sheet directed away from the tool. Reuben teaches a method of producing a vehicle mat (figs 1-4); extruding a sheet of thermoplastic material (thermoplastic elastomer), the sheet having a first side with a plurality of nibs extending therefrom (figs 1-4); and using a pair of rollers wherein one of the rollers has a plurality of indentations to form nibs on a first side of the sheet (figs 1-4). Schriner et al and Reuben are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the extruded mat of Reuben for the fabric/mat of Schriner et al in order to produce a high-quality vehicle mat having greater traction to an underlying surface. It should be noted that the combination of Schriner et al and Reuben would direct one of ordinary skill in the art to place the carpet side of the mat of Schriner et al (modified) against the mold of Schriner et al thus the nib side of the mat of Schriner et al (modified) would be facing away from the mold. Bailey teaches molding a vehicle mat having a one or more sidewalls and a top surface (fig 4); and vacuum forming the mat to the desired contour between two mold dies each having a flat base (figs 4-5). Schriner et al and Bailey are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the mold tool of Schriner et al to produce the contour of Bailey, i.e., redesigning the mold tool to have one or more

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sidewalls that extend upwardly from a flat base and a top surface, in order to produce a diverse vehicle mat that can nest within and abut against the sides of a carpeted floor well of a vehicle. Grover teaches using a curing press/mold wherein a sheet of uncured rubber is molded and cured against a vacuum molding surface of the press/mold (col 3, Ins 53-63); and heating the sheet at least partially simultaneously with the sheet being in contact with the molding surface (col 3, Ins 24-63). It should be noted that Grover is cited in Schriner et al as a molding tool that can be used with the invention of Schriner et al (col 2, lns 38-45). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the sheet of Schriner et al at least partially simultaneously with the sheet being in contact with the molding tool of Schriner et al (modified) as taught by Grover in order to facilitate molding of the sheet. In regard to claims 10-12, Schriner et al teach drawing by vacuum pressure (figs 1-4). However, Schriner et al does not teach using a thermoplastic elastomer; and using the blend of claim 11. In regard to using a thermoplastic elastomer, such is taught by the combination of Reuben and Schriner et al. In regard to using the blend of claim 11, such is a mere obvious matter of choice dependent on the desired final product and material availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known for its durability. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made mold the mat of Schriner et al (modified) from the claimed material in order to impart durability to the mat.

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9. Claims 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schriner et al (USPN 2915427) in view of Reuben (USPN 5171619), Bailey (USPN 4828898) and Grover (USPN 2623242). In regard to claim 13, Schriner et al teach the basic claimed process including a method of producing a vehicle mat/part (figs 1-4); providing a sheet of thermoplastic material, the sheet having a first and second side (figs 1-4); placing the sheet in contact with a contoured molding tool, the first side directed toward the tool and the second side directed away from the tool (figs 1-4); heating the sheet (col 2, lns 57-64); and vacuum forming (drawing) the sheet toward the tool until the sheet is substantially shaped to the contour of the tool (figs 1-4). In addition, Schriner et al also teach placing the carpet side of the mat against the mold and the backing side away from the mold (figs 1-4). However, Schriner et al does not teach using a sheet of thermoplastic material wherein the second side has a plurality of nibs extending therefrom; using a molding tool having one or more sidewalls that extend upwardly from a flat base and a top surface; and locating the second side of the sheet directed away from the tool. Reuben teaches a method of producing a vehicle mat (figs 1-4); and extruding a sheet of thermoplastic material (thermoplastic elastomer), the sheet having a first and second side, the second side having a plurality of nibs extending therefrom (figs 1-4). Schriner et al and Reuben are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the mat of Reuben for the fabric/mat of Schriner et al in order to produce a high-quality vehicle mat having greater traction to an underlying surface. It should be noted that the combination

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of Schriner et al and Reuben would direct one of ordinary skill in the art to place the carpet side of the mat of Schriner et al (modified) against the mold of Schriner et al thus the nib side of the mat of Schriner et al (modified) would be facing away from the mold. Bailey teaches molding a vehicle mat having a one or more sidewalls and a top surface (fig 4); and vacuum forming the mat to the desired contour between two mold dies each having a flat base (figs 4-5). Schriner et al and Bailey are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the mold tool of Schriner et al to produce the contour of Bailey, i.e., redesigning the mold tool to have one or more sidewalls that extend upwardly from a flat base and a top surface, in order to produce a diverse vehicle mat that can nest within and abut against the sides of a carpeted floor well of a vehicle. Grover teaches using a curing press/mold wherein a sheet of uncured rubber is molded and cured against a vacuum molding surface of the press/mold (col 3, lns 53-63); and heating the sheet at least partially simultaneously with the sheet being in contact with the molding surface (col 3, Ins 24-63). It should be noted that Grover is cited in Schriner et al as a molding tool that can be used with the invention of Schriner et al (col 2, lns 38-45). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the sheet of Schriner et al at least partially simultaneously with the sheet being in contact with the molding tool of Schriner et al (modified) as taught by Grover in order to facilitate molding of the sheet. In regard to claims 14-18 and 20, Schriner et al teach drawing by differential pressure (figs 1-4); applying the vacuum pressure through vacuum apertures in the tool

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(figs 1-4); using a male tool (figs 1-4); producing at least one mat (figs 1-4); and cooling the sheet and removing the sheet from the tool (figs 1-4)--as a note, this is inherent with the process of Schriner et al in order to produce a useable mat. However, Schriner et al does not teach using a thermoplastic elastomer; and using the blend of claim 15. The combination of Reuben and Schriner et al teach using a thermoplastic elastomer. In regard to using the blend of claim 15, such is a mere obvious matter of choice dependent on the desired final product and material availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known for its durability. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made mold the mat of Schriner et al (modified) from the claimed material in order to impart durability to the mat.

- 10. Applicant's arguments with respect to claims 1-5,7-18,20 and 22 have been considered but are moot in view of the new ground(s) of rejection.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571.272.1196. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

EDMUND H. LEE Primary Examiner

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EHL

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